

G650 is a two-component epoxy with high-thermal conductivity and adhesive strength. As a heat carrier, alumina powder provides high stability. G650 offers a good adhesive strength, in both metallic as well in other materials. G650 is widely used in LED and semiconductors industries for assembly and many other applications.

Properties	G650	Test Method
Thermal Conductivity	6.5W/mK	JESD51-14
Component A / Component B		
Appearance & Color	Light pink paste / White paste	Visual Inspection
Viscosity@ 25°C	16000cps / 8000cps	Brookfield DV-3
Density@ 25°C	1.63g/ml / 1.25g/ml	ISO 1183
Coefficient of Thermal expansion		
Below Tg	$44 \times 10^{-6} \text{ K}^{-1}$	ISO 11359-2
Above Tg	$126 \times 10^{-6} \text{ K}^{-1}$	ISO 11359-2
Glass transition temperature	107°C.	ISO 11359-2
Lap Shear strength Steel (Grit blasted)	7.6Mpa	ISO 4587
Hardness	73	ISO 868, Shore D
Working Temperature	-40°C. to 150°C. 185°C.	Long term Short term (15 mins)
Volume Resistivity	>1x10	IEC 60093
Breakthrough Voltage	10000V/mm	
Insulation	1000V/mm	
Operating Instructions		
Cure Condition	24 hrs @ 25°C. 4 hrs @ 60°C. 45 mins @ 80°C.	
Working Time	1.5 hrs @ 25°C.	
Life Time and Storage temperature		
Seal avoid light @ 25°C.	3 months	
Seal avoid light @ 10°C.	6 months	
Seal avoid light @ -10°C.	12 months	
Standard Packaging		
Tube (with static mixer) Small	50ml/75g	
Tube (with static mixer) Large	400ml/660g	

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